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### **REMARKS**

Claims 1-26 are all of the claims presently pending in the present Application. Claims 1, 4-6, 8, 12 and 20-22 have been amended to more particularly define the claimed invention.

It is noted that the claim amendments herein are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims, or for any statutory requirements of patentability.

Further, it is noted that, notwithstanding any claim amendments made herein, Applicants' intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 6-7 stand rejected under 35 U.S.C. § 112, second paragraph as being allegedly indefinite. Applicant respectfully submits that claim 6 has been amended to address the Examiner's concerns and therefore, respectfully requests that this rejection be withdrawn.

Claims 1-23 and 26 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ma et al. (U.S. Patent No. 6,795,867), in view of Boudreau et al. (U.S. Patent No. 6,788,692). Claims 24-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ma et al. in view of Boudreau and further in view of Kliland et al. (U.S. Patent No. 6,738,383).

These rejections are respectfully traversed in view of the following discussion.

#### **I. THE CLAIMED INVENTION**

An exemplary aspect of the claimed invention (e.g., as recited in claim 1) is directed to a gatekeeper connected to an H323 network. The gatekeeper includes a first message receiving section which receives a gatekeeper discovery message from an end point, a transport data transmitting section, and a control section.

Importantly, the control section controls the load state notice message transmitting section to transmit a load state of the gatekeeper in response to a load state request message

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received from another gatekeeper when it is determined that the gatekeeper has the lightest load, and not transmit the load state of the gatekeeper in response to the load state request message, when it is determined that the gatekeeper does not have the lightest load (Application at page 17, lines 3-17; Figure 2).

In conventional networks, when a gatekeeper receives a gatekeeper discovery message from an end point, if the gatekeeper can register the data of the end point the gatekeeper sends back a registration possible message regardless of the condition of other gatekeepers. Thus, the load of a gatekeeper can become much heavier or much lighter than other gatekeepers in the network (Application at page 2, lines 1-16).

In an exemplary aspect of the claimed invention, on the other hand, a gatekeeper includes a control section which includes a load state notice message transmitting section, and controls the load state notice message transmitting section to transmit a load state of the gatekeeper in response to a load state request message received from another gatekeeper when it is determined that the gatekeeper has the lightest load, and not transmit the load state of the gatekeeper in response to the load state request message, when it is determined that the gatekeeper does not have the lightest load (Application at page 17, lines 3-17; Figure 2).

That is, in the claimed invention, the gatekeepers do not necessarily have a dependency relationship (e.g., may operate independent of one another) but may share information (e.g., load stated information) with each other. Further, the gatekeepers may autonomously determine which of the gatekeepers has a lightest load. As a result, a load for an end point can be prevented from centering on a specific gatekeeper, and can be efficiently distributed among gatekeepers in the network (Application at page 20, line 24-page 21, line 3).

## II. THE ALLEGED PRIOR ART REFERENCES

### A. Ma and Boudreau

The Examiner alleges that Ma would have been combined with Boudreau to form the

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invention of claims 1-23 and 26. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Ma discloses a telephony system which allegedly manages gatekeeper load by redirecting calls from an assigned gatekeeper to a servicing gatekeeper during call setup. Specifically, the system includes a gatekeeper having a load management unit (LMU) which processes all setup messages. In particular, the LMU selects a gatekeeper in the network to setup and service the call and, based on the selection, either directs the assigned gatekeeper to setup and service the call or redirects the endpoint to a servicing gatekeeper (Ma at col. 2, lines 43-65).

Boudreau discloses a method of balancing a load in a cluster of switches in a network. The method uses a Pong message 234 to exchange information about a current load in a switch (Boudreau at Abstract).

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

Specifically, unlike Boudreau which uses a Pong message 234 to exchange information about a current load in a switch, Ma merely teaches that a first gatekeeper may redirect a call to a second gatekeeper **based on the load on the first gatekeeper**. That is, Ma is completely unrelated to Boudreau.

Further, these references clearly do not teach or suggest their combination. Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Moreover, neither Ma, nor Boudreau, nor any alleged combination teaches or suggests a control section which includes a load state notice message transmitting section, and "controls

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*said load state notice message transmitting section to transmit a load state of said gatekeeper in response to a load state request message received from said another gatekeeper when it is determined that said gatekeeper has the lightest load, and not transmit said load state of said gatekeeper in response to said load state request message, when it is determined that said gatekeeper does not have the lightest load'* as recited, for example, in claims 1 and 20 and similarly recited in claim 8. As noted above, this helps to prevent a load for an end point from centering on a specific gatekeeper, such that the load can be efficiently distributed among gatekeepers in the network (Application at page 20, line 24-page 21, line 3).

Clearly, these novel features are not taught or suggested by Ma. Indeed, the Examiner concedes that Ma does not teach or suggest this feature on pages 3 and 10 of the Office Action. However, the Examiner alleges that this feature is disclosed by Boudreau. This is clearly incorrect.

1. Boudreau does not teach or suggest a gatekeeper that includes a control section which controls the load state notice message transmitting section to transmit a load state of the gatekeeper in response to a load state request message received from another gatekeeper when it is determined that the gatekeeper has the lightest load.

The Examiner attempts to equate the load balancing manager 142 in Boudreau with the gatekeeper control section in the claimed invention. On page 3 of the Office Action, the Examiner surprisingly alleges that the load balancing manager 142 includes this feature of the claimed invention because the load balancing manager 142 "performs the load balancing function in response to a connection request (load state request message) by one of the clients 160<sub>1</sub> to 160<sub>n</sub>" (Office Action at page 3). The Examiner's arguments are completely unreasonable.

First, Applicant notes that in the claimed invention, the control sections controls the load

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state notice message transmitting section to transmit a load state of the gatekeeper in response to a load state request message (e.g., a request to provide a load state of the gatekeeper). However, as Applicant has pointed out to the Examiner Boudreau teaches that the load balancing manager 142 performs the load balancing function in response to a connection request (e.g., a request to connect a client to the intranet 130). Clearly, a request to connect is not necessarily the same as a request to provide a load state. Moreover, the Examiner has provided no explanation for equating the load state request message of the claimed invention with the "connection request" of Boudreau.

Second, and more importantly, in the claimed invention the load state request message is received from another gatekeeper. In Boudreau, the "connection request" is not received from another extranet switch 140 (which the Examiner erroneously attempts to equate with the gatekeeper of the claimed invention), but instead, the connection request is made by one of the clients 1601 to 160k (e.g., see Boudreau at col. 3, lines 60-63).

Indeed, as Applicant has pointed out to the Examiner, nowhere does Boudreau teach or suggest the concept of a "load state request message" from a gatekeeper, and certainly does not teach or suggest transmitting a load state of a gatekeeper in **RESPONSE** to a load state request message. In fact, Boudreau simply teaches that "[p]eriodically, each switch transmits a unicast packet with a specified port destination to every other switch of the cluster as an advertisement of its load" (Boudreau at col. 4, lines 43-46. That is, nowhere does Boudreau teach or suggest that the switch transmits a unicast packet **in response to anything**. Instead, the unicast packet is simply transmitted "periodically".

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2. Boudreau does not teach or suggest a gatekeeper that includes a control section which controls the load state notice message transmitting section to not transmit the load state of the gatekeeper in response to the load state request message, when it is determined that the gatekeeper does not have the lightest load

On page 10 of the Office Action, the Examiner again attempts to equate the "connection request" in Boudreau with the load state request message of the claimed invention. The Examiner further states that the load balancing manager 142 learns the load information of a server based upon the periodic transmission of unicast packets which advertise a server's load and identity. The Examiner then states that "the packets are discarded after the date has been received.

First, Applicant would point out that the load request message may include a message from another gatekeeper requesting that the gatekeeper transmit that gatekeeper's load state information. Therefore, again, it is completely unreasonable for the Examiner to attempt to equate the connection request in Boudreau with the load state request message of the claimed invention.

Moreover, nowhere does Boudreau teach or suggest what if any action a switch 140 (which the Examiner erroneously equates with the gatekeeper of the claimed invention) should take if that switch determines that it does not have the lightest load from among all of the switches. Instead, Boudreau simply teaches that the server decides "which switch of the cluster is best equipped to handle an incoming call or a connection request from a user" (Boudreau at col. 8, lines 7-10).

Therefore, Boudreau certainly does not teach or suggest that the load balancing manager controls a load state notice message transmitting section to not transmit a load state of a switch 140 gatekeeper response to a load state request message, when it is determined that the switch

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140 does not have the lightest load.

Thus, Boudreau does not make up for the deficiencies of Ma.

Therefore, Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

**B. Kliland**

The Examiner alleges that Ma would have been combined with Boudreau and Kliland to form the invention of claims 24-25. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

Kliland teaches an arrangement for distributing and dispatching traffic in a network, by inserting an internal (e.g., arranged in a certain domain) and lightweight (e.g., supporting a limited range of the H.323 message set) gatekeeper between an endpoint and a real gatekeeper (Kliland at Abstract; Figure 5).

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are unrelated, and no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

Specifically, in contrast to Ma and Boudreau, Kliland teaches using an internal (e.g., arranged in a certain domain) and lightweight (e.g., supporting a limited range of the H.323 message set) gatekeeper. Thus, these references clearly do not teach or suggest their combination. Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

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Moreover, neither Ma, nor Boudreau, nor Kliland, nor any alleged combination teaches or suggests a control section which includes a load state notice message transmitting section and *"controls said load state notice message transmitting section to transmit a load state of said gatekeeper in response to a load state request message received from said another gatekeeper when it is determined that said gatekeeper has the lightest load, and not transmit said load state of said gatekeeper in response to said load state request message, when it is determined that said gatekeeper does not have the lightest load"* as recited, for example, in claims 1 and 20 and similarly recited in claim 8. As noted above, this helps to prevent a load for an end point from centering on a specific gatekeeper, such that the load can be efficiently distributed among gatekeepers in the network (Application at page 20, line 24-page 21, line 3).

Clearly, these novel features are not taught or suggested by Kliland. Indeed, the Examiner has not even alleged that this feature is taught or suggested by Kliland.

In fact, Applicant would point out that Kliland teaches that a lightweight gatekeeper has knowledge of valid real gatekeepers' load (Kliland at col. 3, lines 9-11) and that load information might be exchanged between a real gatekeeper and a lightweight gatekeeper (Kliland at col. 3, lines 55-58).

However, nowhere does Kliland teach or suggest a gatekeeper includes a control section which includes a load state notice message transmitting section, and controls the load state notice message transmitting section to transmit a load state of the gatekeeper in response to a load state request message received from another gatekeeper when it is determined that the gatekeeper has the lightest load, and not transmit the load state of the gatekeeper in response to the load state request message, when it is determined that the gatekeeper does not have the lightest load (Application at page 17, lines 3-17; Figure 2).

Thus, Kliland does not make up for the deficiencies of Ma and Boudreau.

Therefore, Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every



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element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

### III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-26, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.


Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date:

10/29/07

Respectfully Submitted,



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**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that the foregoing Response was filed by facsimile with the United States Patent and Trademark Office, Examiner Donald L. Mills, Group Art Unit # 2616 at fax number 571-273-8300 this 29<sup>th</sup> day of October, 2007.



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